

preface to this edition, that the former contained many imperfections and mistakes, but that in this the whole work has been corrected, revised, and in parts almost re-written. This confession has probably been made in deference to the strictures of a few captious critics, who cannot understand, or are unable to tolerate, good honest Anglo-Saxon (a little *too* honest, it may be, at times), perfectly suited to the bricklayers, carpenters, and blacksmiths for whom it was intended. But it appears to us that one of the most valuable (because one of the most rare) gifts which Prof. Ramsay possesses is that of being able, with perfect ease and apparently without effort, to adapt himself so well to the calibre of his audience. He is thus equally at home, though acting so differently, as President of the Geological Society and as a teacher of geology to working men.

The principal addition made to the book in this edition is a little coloured geological map of Great Britain, done wonderfully well, considering the scale, and extremely useful as a help to the unlearned in their attempts to understand the subjects treated of. Professor Ramsay's plan of instruction in this case is to associate the peculiarities of the geological structure of the country with those of its surface-configuration; and thus he is enabled to impress more vividly on the mind the salient features of the one subject, and to explain more easily the causes of the phenomena included in the other. Nothing could be more simple, or better adapted to the audience, than this plan of procedure; and the exhaustion of the first edition of these Lectures in less than a twelvemonth shows that nothing could be more acceptable, or better understood, by the public at large.

PROCEEDINGS OF LEARNED SOCIETIES.

ZOOLOGICAL SOCIETY.

Jan. 26, 1864.—E. W. H. Holdsworth, Esq., F.Z.S., in the Chair.

NOTES ON SEALS (PHOCIDÆ), INCLUDING THE DESCRIPTION OF A NEW SEAL (*HALICYON RICHARDII*) FROM THE WEST COAST OF NORTH AMERICA. BY DR. J. E. GRAY, F.R.S.

Mr. Charles B. Wood, the Surgeon of H.M.S. 'Hecate,' has very kindly sent to the British Museum, along with other interesting specimens from the north-western part of North America, the skeleton of a Seal from Fraser's River, and the skull of a Seal obtained on the west coast of Vancouver's Island.

The skull was procured from the natives, who had the animal towed along the side of their canoe. They refused to part with the entire animal, but were at length induced to sell the head.

The examination of the skulls shows that the two Seals evidently belong to the same species, the specimen from Fraser's River being adult, and the other not quite so old. Mr. Wood observes that "the younger Seal was captured among the islands in Queen Charlotte's Sound, at the north end of Vancouver; has a fur of a dark brown,

almost black colour; and is unlike that from the Fraser's River, which is lighter and less timid, being often seen seated on a log floating down with the current."

The skull of this Seal differs so greatly from those of any of the Seals on the eastern side of the Arctic Ocean, that I am induced to propose for it a new subdivision, which may be thus named and characterized:—

HALICYON.

The palate of the skull arched out behind. Cutting-teeth $\frac{6}{4}$. Grinders 3 or 5, lobed, compressed. The lower jaw strong, bowed out on the sides, thick in front, and with a low crest on the inner side of the lower edge near the front; the ramus of the lower jaw erect, with a tubercular prominence beneath the notch at the angle.

HALICYON RICHARDII, sp. nov.

Fur pale brown; when young, darker.

Hab. Fraser's River and Vancouver's Island.

I have dedicated this species, at the request of Mr. Wood, to Capt. Richard, the Hydrographer to the Admiralty, and Captain of H.M.S. 'Hecate' when these Seals were collected. I have the more pleasure in doing this, as the Museum has received many very interesting specimens collected during the voyage of the 'Hecate,' showing the interest which her Commander takes in the natural sciences, which I have no doubt will receive additional encouragement in the new position which he has won by his hydrographic and scientific qualifications.

The skull resembles that of *Callocephalus hispidus* and *Pagophilus grœnlandicus* in the dilatation of the front part of the lower edge of the lower jaw; but it agrees with *Callocephalus hispidus* most in the greater development of the face, and in the concave edge of the hinder part of the palate.

It differs from these skulls—

1. In the dilatation of the lower jaw not being extended so far back, only occupying the first two-fifths of the length of the jaw; while in the other two species it occupies full half the length of that bone.
2. In the sides of the lower jaw being much wider apart, and arched outwards, making the space between them much wider behind, agreeing in this respect with *Phoca barbata*.
3. In the front of the lower jaw being thick and swollen, and with only a slight ridge on the middle of the lower edge in front, and the jaws in this part being well separated from each other, not thin, concave inwardly, and with a well-developed inferior edge on the inner sides, those of the two sides of the jaws being parallel and near together in the centre. The angle at the hinder lower edge of the lower jaw is much more produced, and with a more prominent tubercle, than in either *Callocephalus hispidus* or *Pagophilus grœnlandicus*.
4. The hinder edge of the palate being concave forwards, and not straight and transverse as in *Pagophilus*, nor angularly cut out as in *Callocephalus*.

In the younger specimen the edge of the palate has a slight prominence in the middle of each side; but this is evidently an accidental deformity, as the prominences are not of the same size in the two sides. In the adult skull the two sides of the palate are evenly arched out.

The lower jaw most resembles that of the restricted genus *Phoca* (of which *P. barbata* is the type) in being solid and strong, and in

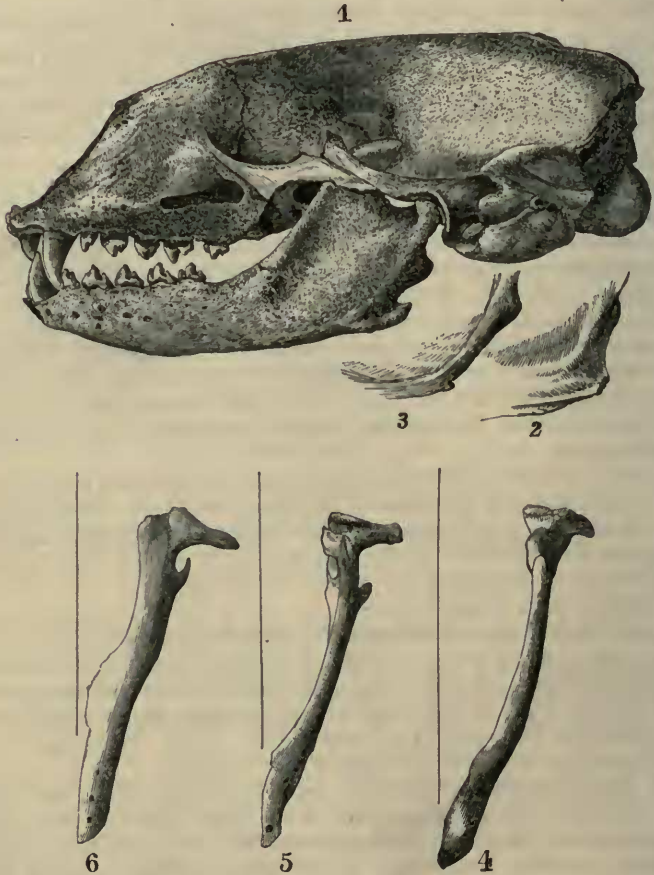


Fig. 1. Skull of *Halicyon Richardii*.

2. End of lower jaw of *Phoca barbata*, to show the dilatations and inflexions of the lobe over the angle.
3. End of the lower jaw of *Pagomys fœtidus*. The end of the jaw of *Callocephalus vitulinus* is somewhat similar.
4. Lower edge of the lower jaw of *Halicyon Richardii*.
5. Lower edge of the lower jaw of *Phoca barbata*.
6. Lower edge of the lower jaw of *Pagophilus grœnlandicus*. The jaw of *Pagomys fœtidus* is somewhat similar, but much smaller.

the two sides being arched out, leaving a very wide oval space between them, the front part of the space being continued by a tubercle on the inner edge of the front of the jaw, a short distance from the symphysis.

In *Phoca* the tubercle on the inner side of the lower edge is short, rounded, blunt, and more or less rugose; in the new Seal, *Halicyon*, it is a short-edged, elongated ridge. In *Phoca* the teeth are small, erect, and far apart; and in *Halicyon* they are larger, closer together, and distinctly three- or five-lobed.

In *Halicyon* the hinder edge of the ramus of the lower jaw is simple, with a distinct notch between it and the tubercular angle of the jaw. In *Phoca* the hinder edge of the ramus is inflected, forming a large half-oblong lobe, convex in front, and concave behind. (fig. 2).

It is very interesting to observe that there is a representative genus on each side of the Arctic Pole; and this agrees with my previous experience—that each species of Seal has a limited, indeed I may say a very well-defined and very limited, geographical distribution. Though the species are very difficult to distinguish by their external characters, yet the skeleton, and especially the skull, affords well-marked and very definite characters.

M. Lepechin described a *Phoca oceanica* (Act. Petrop. 1777, 259. t. 6 & 7), which has been considered the same as *Pagophilus grœnlandicus*, as abundant on the ice around Nova Zembla. It would be curious to see the skull of a specimen from that locality, and thus discover which species extends itself so far north as those islands. *Phoca oceanica*, in its young and old state of fur, resembles *Pagophilus grœnlandicus*; but unfortunately we have only a very limited knowledge of the external appearance of this new Seal from Vancouver's Island.

The study of a large series of specimens of several species of Seals shows that the form of the lower jaw, though hitherto little attended to by zoologists, affords a very good character for the distinction of the species.

In *Pagophilus grœnlandicus* and *Halicyon Richardii* the angle of the lower jaw is far back, and the hinder edge of the ramus ascends nearly perpendicularly, with a notch at the hinder end, as shown in fig. 6. In *Phoca barbata* the form of the lower jaw and ramus is nearly similar; but instead of a notch near the angle, the inner edge is produced inwards into a rounded lobe (fig. 2, and see Cat. Seals B.M. p. 27, f. 9).

In *Callocephalus vitulinus* and *C. (Pagomys) fœtidus*, on the contrary, the angle of the lower jaw is more towards the front, and the hinder edge of the ramus ascends obliquely with the notch considerably in front of the condyle (see fig. 3).

M. Gaimard, in his 'Voyage to Iceland and Greenland,' Mammalia, plate 11, devotes a plate to the skull and teeth of the Seals of Iceland and Greenland; but he does not pay any attention to the form of the lower jaw, except incidentally, when representing the teeth of the lower jaw of his *P. annellata* (t. 11. f. 9). I may ob-

serve that this author names on his plates what we call *Phoca annellata* *P. hispida*, and what we call *P. grænelandica* *P. annellata*.

Believing it to be desirable that the Seals, which are so difficult to distinguish by their external characters, should be divided into small sections or subgenera by organic characters, I propose to divide the tribe of *Phocina*, as defined in my Monograph (see Cat. Seals in the British Museum, p. 20), thus :—

1. Branches of lower jaw diverging ; the lower edge of the lower jaw rounded, simple ; palate angularly arched behind ; angle of lower jaw blunt, sloping behind. CALLOCEPHALUS. *C. vitulinus*.
2. Branches of lower jaw diverging ; lower edge of lower jaw dilated on the inner side.
 - * Palate angularly notched behind ; angle of lower jaw blunt, sloping behind. PAGOMYS. *P. foetidus*. *P. ? nummularis*.
 - ** Palate truncated behind ; angle of lower jaw acute, erect behind, with a notch above the basal tubercle. PAGO-PHILUS. *P. grænelandicus*.
3. Branches of lower jaw arched on the side and wide apart ; lower edge produced on the inner side behind the symphysis ; palate arched.
 - * Tubercle on inner edge of front part of lower jaw elongate, sharp-edged ; teeth moderate ; angle of lower jaw simple, with a distinct notch above it. HALICYON. *H. Richardii*.
 - ** Tubercle on inner edge of front part of lower jaw blunt, rugulose ; teeth small ; angle of lower jaw with a rounded lobe on inner side above the basal tubercle. PHOCA. *P. barbata*.

PAGOMYS ? NUMMULARIS.

The lower jaws short and broad ; the grinders thick, with a broad thick central lobe, and nearly side by side (in the skulls of the young animals).

Phoca nummularis, Temm., Faun. Jap. Mamm. Mar. p. 3.

Hab. Japan (*Temm.*).

This species is only known from some skins and three fragments of skulls in the Leyden Museum.

My excellent friend Professor Schlegel, the energetic Curator of the Leyden Museum, has most kindly sent to me for examination and comparison the fragments of skulls above referred to : they consist of the face-bone and the lower jaws of three specimens ; the most perfect specimen has part of the orbit and the upper part of the brain-case attached to it. They are all from very young specimens, of nearly the same age ; and, unfortunately, the most perfect one is without the hinder portion of the palate, so that I cannot make sure that it has the same form of the palatine margin that is found in *Pagomys* ; but the part of the side of the palate that is present, when compared with the same part in *Pagomys*, leads one to think it most likely to be of the same form as in that genus.

The general form and size of the face, and the form of the teeth, are very similar to those of a skull of *Pagomys fœtidus* of the same age. It only differs from the latter in the lower jaw being rather shorter and broader, in the grinders being larger, thicker, and rather closer together, in the central lobe of the grinders being considerably larger, thicker, and stronger, and in all the lobes of the grinders being more acute. The lower margin of the lower jaw is dilated in front, just as in *Pagomys fœtidus*; but the jaws behind the dilatation diverge more from each other, leaving a wider space between them at the hinder part. The form of the hinder angle of the jaws is very similar in the two species. The orbit is rather smaller and more circular; for in *P. fœtidus* it is rather oblong, being rather longer than wide. The forehead appears, as far as one can judge by the fragments, to be flatter and broader, and the nose rather shorter.

The following measurements show the difference between the two species:—

	<i>P. fœtidus.</i> in. 12ths.	<i>P. nummularis.</i> in. 12ths.
Length of lower jaw to hinder notch ..	2 11	1 7
Length of lower jaw to end of dilatation.	1 5½	1 2½
Length of upper teeth-line	1 3½	1 2
Length of three grinders	0 2½	0 3
Width at outside of hinder notch	1 9	1 7
Length of orbit	1 8½	1 5

The *Phoca nummularis* of Japan has been considered to be identical with *Phoca Larcha* of Pallas, from the east shore of Kamtschatka, the *Phoca Chorissii* of Lesson, and the *Phoque tigre* of Kraschennienikow (which has been named *Phoca tigrina* by Lesson), on the strength of their coming from nearly the same district; but I am not aware that specimens of any of the latter species exist to verify the union and determine what are the species described under these names.

The British Museum has lately purchased the dead body of a Seal, which had been exhibited in London as the "Talking Fish." The proprietor, an Italian, at first said it was from the coast of South America, but afterwards admitted that it was from one of the ports on the north side of the Mediterranean; and on examination it proved to be the Monk Seal (*Phoca albiventer*), the type of the genus *Monachus* of Fleming and *Pelagus* of F. Cuvier, a genus which was one of the desiderata in the Museum Collection.

The comparison of the skull of this animal with the skulls of the Seal from Madeira, which I described in the 'Annals and Magazine of Natural History' for 1854 under the name of *Heliophoca atlantica*, has shown that the latter animal is the same as the Mediterranean Seal.

The British Museum has since received from M. Verreaux a very good skeleton of a Seal from Algiers, under the name of *Phoca leporina*, which is evidently the same as the *Phoca albiventer* of Cuvier (Oss. Foss. v. t. 17).

The following synonyms will therefore have to be added to those which I have placed under *Monachus albiventer* in the Catalogue of Seals in the British Museum, p. 18 :—

Heliophoca atlantica, Gray, Ann. & Mag. N. II. 1854 ; Arch. f. Nat. 1855, p. 40.

Phoca leporina, Verreaux, not of Lepechin.

Hab. North and south shores of the Mediterranean, île d'Oléron, and Madeira.

These facts are interesting as showing that the Seal which was formerly believed to be confined to the north shore of the Mediterranean is also found on the southern one and on the islands of the Atlantic.

Nilsson, in his excellent monograph on the genus, after having examined all the materials that he could find in the different museums, reduced the number of species of Seals to fourteen.

We have now in the British Museum, as by the following list will appear, twenty-four most distinct species, established upon the examination of the osteological as well as the external characters of the animals.

1. *Lobodon carcinophaga*, Gray, Cat. p. 10. Antarctic Ocean.
2. *Stenorhynchus leptonyx*, Gray, Cat. p. 13. Antarctic Ocean.
3. *Leptonyx Weddellii*, Gray, Cat. p. 16. Antarctic Ocean.
4. *Monachus albiventer*, Gray, Cat. p. 18 = *Heliophoca atlantica*, Gray. North and south shores of the Mediterranean ; Madeira.
5. *Monachus? tropicalis*, Gray, Cat. p. 28. Jamaica.
6. *Ommatophoca Rossii*, Gray, Cat. p. 19. Antarctic Ocean.
7. *Callocephalus vitulinus*, Gray, Cat. p. 21. North Seas.
8. *Pagomys fetidus*, Gray, Cat. p. 23. North Seas.
9. *Halocyon Richardii*, Gray, P. Z. S. 1864. Vancouver's Island.
10. *Pagophilus grænelandicus*, Gray, Cat. p. 25. North Sea.
11. *Phoca barbata*, Gray, Cat. p. 27. North Sea.
12. *Halichærus Grypus*, Gray, Cat. p. 30. North Sea.
13. *Trichechus Rosmarus*, Gray, Cat. p. 32. North Sea.
14. *Morunga elephantina*, Gray, Cat. p. 34. Antarctic Ocean.
15. *Cystophora cristata*, Gray, Cat. p. 36. North Sea.
16. —? *antillarum*, Gray, Cat. p. 38. Jamaica.
17. *Arctocephalus monteriensis*, Gray, P. Z. S. 1859, p. 358, t. 72. California.
18. — *Hookeri*, Gray, Cat. p. 45. Falkland Islands.
19. — *lobatus*, Gray, Cat. p. 44. Australia.
20. — *nigrescens*, Gray, P. Z. S. 1859, p. 109. Falkland Islands.
21. — *Gillespii*, Gray, P. Z. S. 1859, p. 110, t. 70. California.
22. — *Delalandii*, Gray, P. Z. S. 1859, p. 107, t. 69. Cape of Good Hope.
23. *Callorhinus ursinus*, Gray, P. Z. S. 1859, pp. 103, 359, t. 68. Behring's Straits.
24. *Otaria leonina*, Gray, Cat. p. 47 ; P. Z. S. 1859, p. 360. Southern Pacific Ocean.

Besides these species, I have very little doubt that the *Phoca caspica* of Nilsson, from the Caspian Sea, the *Leo marinus* of Steller, from Behring's Straits, and *Pagomys nummularis*, from Japan, are distinct. I am not aware that the *Leo marinus* of Steller exists in any museum; the specimen we received from the St. Petersburg Academy under that name is the *Callorhinus ursinus* of the 'Proceedings of the Zoological Society' for 1859.

NOTICE OF A NEW SPECIES OF GOLIATHUS. BY G. R. GRAY.

Dr. Kirk has, on his return from the Zambesi, added to our knowledge a species of the genus *Goliathus*, which he obtained as long ago as November 1858, when he picked it up among the hills of Kebrabassa, which is situated about forty miles beyond the Portuguese town of Tete. As it appears to be new, I have ventured to lay a description of it before the Society under the name of *Goliathus Kirkianus*.

♂. Castaneous black, with the upper part of head, the seven narrow longitudinal lines on the thorax, the base, and outer edges of the elytra broadly margined, also with a series of narrow irregular transverse lines on their centres of a pearly white. The bifurcated horn in front of the head, all beneath the body, and legs deep castaneous; the four hind legs fringed inwardly with pale rufous hairs. Scutellum of a long-triangular form, castaneous black, with a short narrow longitudinal line in the centre of a pearly white.

Of the known species it approaches most nearly to the *Goliathus Fornassinii*, from which, however, it differs in the form of the head and thorax: the former is longer, with the bifurcated horn in front shorter, while each fork of it is broader, with the apex of each broadly truncated; the latter is less rounded, with the sides subangulated in the centre, thus differing from the figure of the head of the male given in the 'Ann. de la Soc. Ent. de Fr.' iv. pl. 7. f. 1a.

Feb. 9, 1864.—John Gould, Esq., F.R.S., in the Chair.

THIRD CONTRIBUTION TO OUR KNOWLEDGE OF BATRACHIANS FROM AUSTRALIA. BY DR. A. GÜNTHER.

The following is a continuation of two other papers treating on the same subject; they were published in the 'Annals and Magazine of Natural History,' 1863, p. 26, and in the 'Proceedings' of this Society, 1863, p. 249.

MIXOPHYES (g. n. RANIDARUM).

Habitus as in *Rana*, the head being broad and large; legs of moderate length. Tongue circular, not notched behind; vomerine teeth in two series; lower jaw without tooth-like apophyses. Openings of the Eustachian tubes narrower than the choanæ; tympanum distinct. Fingers free, none opposite to the others; interdigital membrane between the toes well developed; fifth toe moveable to its base; a long, compressed, subsemicircular tubercle at the meta-

tarsus. Male with a single subgular sac, which is not visible externally.

MIXOPHYES FASCIOLATUS.

This Batrachian approaches the true Frogs more closely than any other known from the Australian region; its habitus is that of *Rana*, but the head is disproportionally large and broad. The snout is obtusely rounded, with the canthus rostralis gradually descending in a gentle curve, and with the loreal region obliquely flattened. The nostril is scarcely below the canthus, midway between the eye and the end of the snout. The eye is large, prominent. Cleft of the mouth very wide, much broader than long. The vomerine teeth are in a nearly straight line, between the anterior angles of the choanæ, the two series being separated in the middle by a narrow space. Two long slits on the side of the tongue lead into the subgular sac. The tympanum is nearly as large as the eye. With the exception of a very slight fold above the tympanum, the skin is perfectly smooth.

Fingers tapering, rather slender. The length of the body equals the distance between vent and heel, but it is much more than the length of the remaining foot. Toes two-thirds webbed, so that the three outer phalanges of the fourth toe remain free.

Upper parts brownish olive, with a darker cross band between the hinder half of the superciliaries. A black band runs along the canthus rostralis, widening on the foremost part of the snout below the nostril, and is continued behind the eye, above the tympanum; sides of the body with round brown or black spots; legs with numerous black cross bands, which are most distinct on the hinder side of the fore legs and on the anterior side of the hind limbs. Lower parts uniform white; throat of the male brownish.

Specimens of this Frog have been sent by Mr. Krefft from the Clarence River; the following are the dimensions of an adult female:—

	lines.
Length of the body	33
Width of the mouth	14
Length of the fore limb	23
——— of the third finger	7
——— of the hind limb	54
——— of the entire foot	23
——— of the fourth toe	15½

PTEROPHRYNUS AFFINIS.

Habit as in *Camariolius varius*, Peters, but with the snout longer and more pointed; the canthus rostralis is rather distinct between eye and nostril, and is strongly deflexed in front. Upper parts smooth, the lower coarsely granulated. Eye rather large, not much shorter than the snout. Tongue narrow, ovate, entire behind; vomerine teeth none, but there is a short, scarcely perceptible osseous ridge in front of the orbital groove. Toes not fringed; tarsus with a longitudinal fold of the skin; metatarsus with two minute tubercles.

The length of the body is more than the distance between vent and metatarsal tubercles. Upper parts reddish olive, with a double series of irregular blackish spots along the back; a black band runs from behind the eye along the side of the body towards the loin, a blackish streak along the canthus rostralis. Lower parts whitish.

	lines.
Length of the body	12
——— of the hind limb	16
——— of the fourth hind toe	5
Distance between vent and knee	4½

Hab. Western Australia.

Having found in the collection of the British Museum a specimen of *Pterophrynus verrucosus*, Lütken, I convinced myself that the slight swelling of the skin between the angle of the mouth and the shoulder is not produced by an accumulation of glands, so as to deserve the name of a parotoid. The processes of the sacral vertebra are so slightly dilated, that they might be described as cylindrical; however, each process terminates in a cartilage, which is very distinctly dilated. On comparing this Frog with the *Camariolius* of Peters, I came to the conclusion that both these genera must be united; for although Professor Peters describes the processes of the sacral vertebra as narrow, I find them in *Camariolius varius*, Peters, as slightly dilated as in *Pterophrynus*. Probably any one who had no opportunity of observing the following species would have overlooked the dilatation of those processes in the species mentioned. *P. levis* has them very distinctly dilated, and *P. affinis* and *P. tasmaniensis* are, in this respect, intermediate between these extreme forms. They form only one genus, which, perhaps, must be still further extended; for, whilst none of the species mentioned are provided with vomerine teeth, several specimens in our collection, which, perhaps, are the *Cystignathus Georgianus* of D. & B., and which can scarcely be generically separated from our *Pterophryni*, have those teeth well developed. Tschudi has proposed the name of *Crinia* for the last-named species.

PTEROPHRYNUS TASMANIENSIS.

Very similar to *Camariolius pictus*, Peters; upper and lower parts nearly entirely smooth, with scarcely any trace of flat tubercles. Snout rounded in front, somewhat pointed, sloping downwards in a gentle curve from the nostrils. Eye of moderate size, rather longer than its distance from the nostril. Tongue narrow, ovate, entire behind; vomerine teeth none. Toes fringed; *tarsus without longitudinal fold*; metatarsus with two minute tubercles. The length of the body equals the distance between vent and metatarsal tubercles. Upper parts blackish brown, with a more or less distinct broad reddish-olive band running from behind the eye towards the loin; lower parts beautifully rose-coloured, largely marbled with black; the pre-anal parts black.

	lines.
Length of the body	13
—— of the hind limb	19
—— of the fourth hind toe	6
Distance between vent and knee	5

Hab. Van Diemen's Land.

PTEROPHRYNUS LÆVIS.

Habit as in *Pseudophryne*; snout rather short and rounded, with the canthus rostralis obtuse. Eye considerably shorter than the snout. Upper and lower parts perfectly smooth. Tongue narrow, ovate, entire behind; vomerine teeth none. Tympanum very small, covered not only by the skin, but also by muscle. Toes not fringed, without subarticular tubercles; neither a tarsal fold nor metatarsal tubercles are present. The length of the body is not much less than that of the hind limb. Brownish olive; small yellow spots are scattered over the upper parts; numerous brown spots on the belly and on the lower side of the hind limb.

	lines.
Length of the body	13
—— of the hind limb	16
—— of the fourth hind toe	$5\frac{1}{2}$
Distance between vent and knee	$4\frac{2}{3}$

Hab. Van Diemen's Land.

LITORIA WILCOXII.

Snout of moderate length, somewhat pointed in front, the distance between the front angles of the orbits being equal to that between the eye and the extremity of the snout. Canthus rostralis angular; nostril much nearer to the end of the snout than to the eye. Tympanum very distinct, half the size of the eye. Skin perfectly smooth; a fold across the chest; belly granulated. Vomerine teeth in two oblique short series between the anterior part of the choanæ; tongue entire behind. Openings of the Eustachian tubes much narrower than the choanæ. Limbs rather slender: the third finger is longer than the fourth. The length of the body is a little less than the distance between vent and heel. Tarsus with a lateral fold of the skin; metatarsus with two small tubercles. Toes three-fourths webbed; the length of the fourth toe is a little less than one-half of that of the body. Disks rather small.

Upper parts greyish olive, indistinctly marbled with darker; a dark cross band between the eyes. A black band runs from the snout along the canthus rostralis, and is continued behind the eye, across the tympanum, to behind the axil. Sides of the belly and hinder side of the thigh yellow, marbled with black.

	lines.
Length of the body	19
Width of the cleft of the mouth	$6\frac{2}{3}$
Length of the fore limb	$13\frac{1}{2}$
—— of the third finger	$4\frac{1}{2}$

	lines.
Length of the hind limb	35
——— of the entire foot.....	15
——— of the fourth toe.....	9

Two specimens were sent by Mr. Krefft; they were collected at the Clarence River by James F. Wilcox, Esq., to whom science is indebted for many valuable acquisitions from that country.

I take this opportunity of remarking that *Hyla aurea*, Less., has the first finger opposite to the three others, and that therefore it ought to be referred to the genus *Litoria*.

HALOPHILA PLATYDACTYLA.

This species is very similar to *H. vitiana*, Bibr., but distinguished by the very broad terminal disks of the fingers, which are as large as the tympanum. In the form of its head it agrees with the other species mentioned; the tympanum is not quite half as large as the eye; the choanæ and openings of the Eustachian tubes are small, and the minute vomerine teeth form only a very short oblique series behind the choanæ. The skin is perfectly smooth. The first finger is shorter than the others. The length of the body is more than the distance between vent and heel. Toes with a rudimentary web, and with the terminal disks much smaller than those of the fingers; the third toe is longer than the fifth; metatarsus with two minute tubercles. Uniform brownish violet above; light brownish below.

Length of the body 16 lines, of the hind limb 22 lines, of the fourth toe 7 lines, of the fore limb $11\frac{1}{2}$ lines.

The locality where this species has been obtained is not known, but it is probable that it came from one of the Feejee Islands.

MISCELLANEOUS.

Notice of a new Genus (Silurana) of Frogs from West Africa.

By Dr. J. E. GRAY, F.R.S. &c.

MR. MOORE, of the Free Museum, Liverpool, has kindly sent to me for examination some young Frogs and their larvæ which he has lately received. They are peculiar for having a very long beard, like the cirri of a *Silurus* or Cat-fish, on each side of the mouth. The larva has the flat head and much the appearance of that genus of fish.

SILURANA (Fam. *Dactylethridæ*).

The mouth with an elongated beard on each side, at the angle of the gape. Tarsus with a spur at the base of the first toe; the rest like *Dactylethra*.

The larva with a very broad flat head, and a very long beard at the angle of the mouth on each side: this beard in the larva is as long as the body; it is shorter and thicker in the specimens which have their fore and hind feet well developed but still retain their tail. The tail is compressed, finless above, but with a broad, well-developed membranaceous fin extending the whole length of the lower edge.